CRANE

RADIATORS

NEW BEAUTY IN THE OPEN

Copyright, Crane Co., November, 1931

The name **CRANE** Reg. U. S. Pat. Office

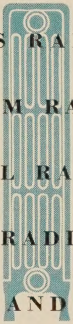
CRANE

DIRECT *and* SHIELDED

RADIATORS

In all Standard Sizes

Also



LEGLESS RADIATORS

BATHROOM RADIATORS

HOSPITAL RADIATORS

WALL RADIATORS

AND

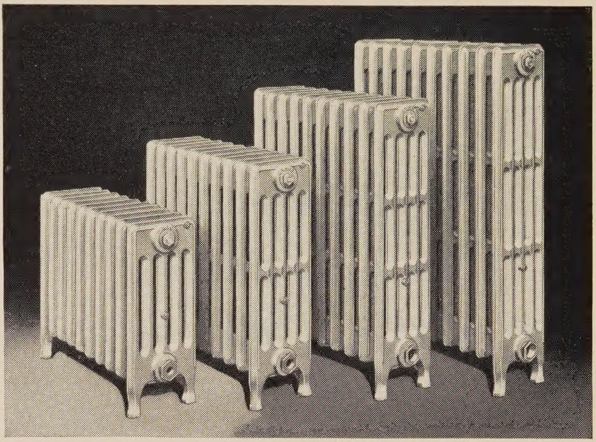
DOHERTY-BREHM

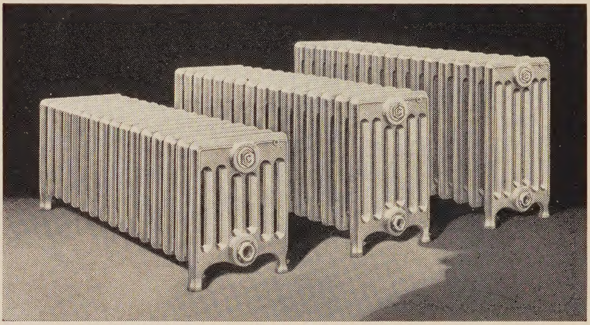
HUMIDIFYING RADIATORS

Founded by R. T. CRANE, 1855

CRANE CO.

GENERAL OFFICES, 836 S. Michigan Ave., Chicago—NEW YORK, 23 W. 44th St.
Branches and Sales Offices in One Hundred and Ninety Cities
Radiator Manufacturing Plants—Bridgeport and North Tonawanda, N. Y.





CRANE

CRANE

radiators are more than new

they are ahead of their times

◆

A BRIEF twelve months after they were introduced, Crane radiators occupied a position in the heating field which had never before been held except by materials with records of years' sustained leadership.

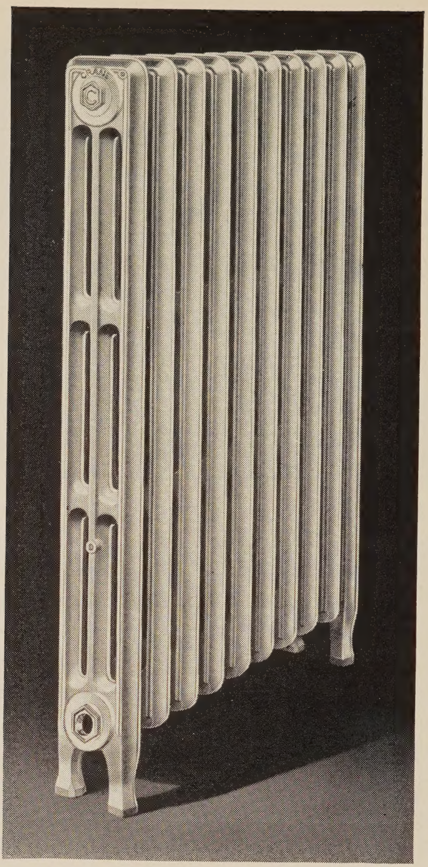
The reasons for this are apparent after the most casual examination of the following pages . . . for Crane radiators are more than new; they are ahead of the times.

At every point of their designs they provide some telling contribution to beauty, comfort, fuel savings, economy.

The open, lacy columns which modern efficiency and modern decorative trends favor, have made screw nipple construction desirable. In using this method of assembly, Crane Co. has again proved its right to its reputation for engineering exactness. This method of construction makes addition of extra sections or the reducing of the number of sections easy.

Crane radiators with the exception of wall, hospital, and bathroom types can be equipped with an exclusive shield. They are in fact the only radiators designed to allow the integral insertion of shields which reduce to a marked extent the difference between floor and ceiling temperatures, save fuel, and truly protect walls and hangings against smudge and soot.

Finally, and perhaps most important of all, Crane radiators are made in styles and sizes to fill all building requirements . . . to meet the special needs of hospitals, auditoriums, gymnasiums, etc., as well as the ordinary demands imposed by every-day architectural necessity.



THE THREE TUBE

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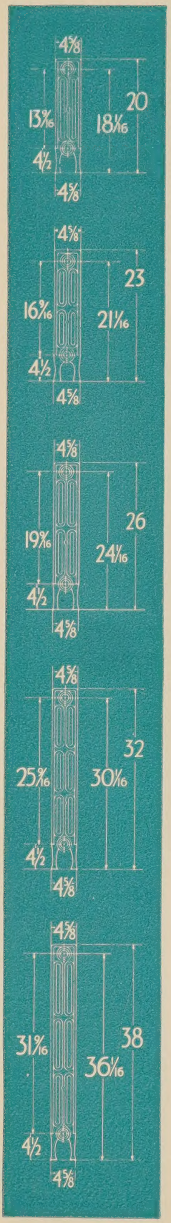
For corridors, bedrooms, or wherever limited floor space makes a wide radiator inadvisable, the Crane Three Tube is made. The slender tubes are not only pleasing to the eye, they give a scientifically correct ratio of heating area and air space.



THE THREE TUBE

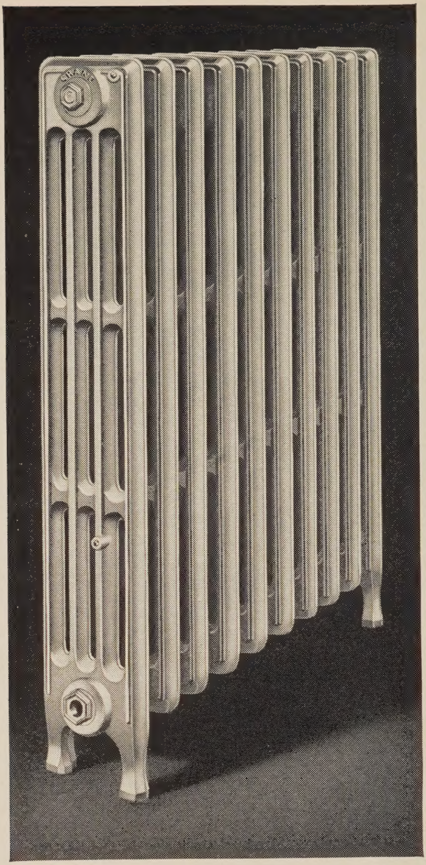
No. of Sections	*Length 2½ in. Per Sec.	Heating Surface—Square Ft.				
		38-in. Height 3½ Sq. Ft. Per Sec.	32-in. Height 3 Sq. Ft. Per Sec.	26-in. Height 2⅓ Sq. Ft. Per Sec.	23-in. Height 2 Sq. Ft. Per Sec.	20-in. Height 1¾ Sq. Ft. Per Sec.
2	5	7	6	4⅔	4	3½
3	7½	10½	9	7	6	5¼
4	10	14	12	9⅓	8	7
5	12½	17½	15	11⅔	10	8¾
6	15	21	18	14	12	10½
7	17½	24½	21	16⅓	14	12¼
8	20	28	24	18⅔	16	14
9	22½	31½	27	21	18	15¾
10	25	35	30	23⅓	20	17½
11	27½	38½	33	25⅔	22	19¼
12	30	42	36	28	24	21
13	32½	45½	39	30⅓	26	22¾
14	35	49	42	32⅔	28	24½
15	37½	52½	45	35	30	26¼
16	40	56	48	37⅓	32	28
17	42½	59½	51	39⅔	34	29¾
18	45	63	54	42	36	31½
19	47½	66½	57	44⅓	38	33¼
20	50	70	60	46⅔	40	35
21	52½	73½	63	49	42	36¾
22	55	77	66	51⅓	44	38½
23	57½	80½	69	53⅔	46	40¼
24	60	84	72	56	48	42
25	62½	87½	75	58⅓	50	43¾
26	65	91	78	60⅔	52	45½
27	67½	94½	81	63	54	47¼
28	70	98	84	65⅓	56	49
29	72½	101½	87	67⅔	58	50¾
30	75	105	90	70	60	52½

*Add ½″ to length for each bushing.

Tappings—1½″ right hand thread top and bottom. Bushed for water, steam or vapor as per specifications. All air valve tappings are ⅛″.

Connections—Extra heavy right and left threaded malleable iron nipples at top and bottom.

Furnished on special order with 6″ legs or legless.



THE FOUR TUBE

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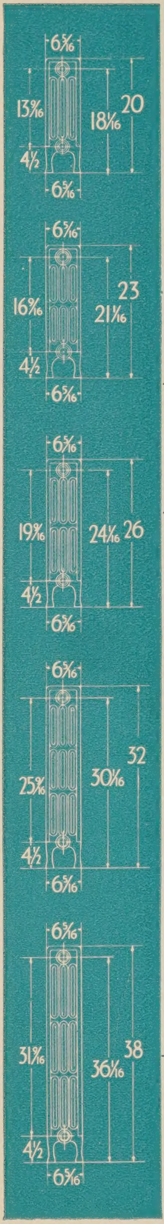
When wall space and floor area call for a radiator neither over-long nor over-wide, the right amount of radiation surface is often best supplied by the Four Tube. As in all Crane radiators, the open columns make cleaning easy. And how symmetrically handsome they are!



THE FOUR TUBE

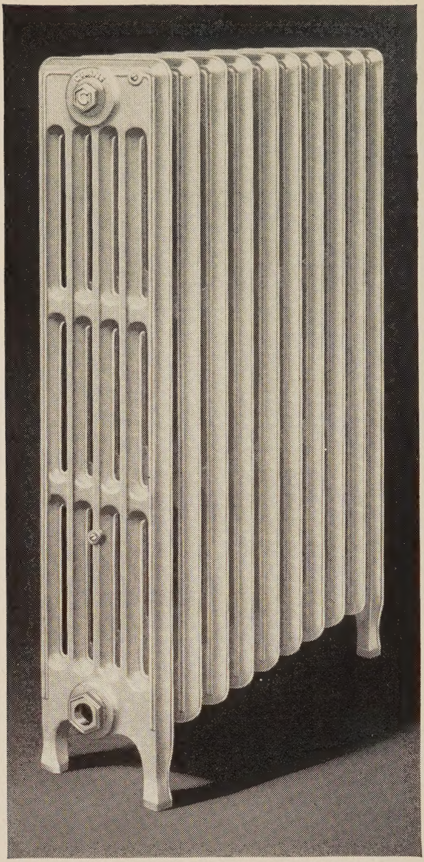
No. of Sections	*Length 2½ in. Per Sec.	Heating Surface—Square Ft.				
		38-in. Height 4¼ Sq. Ft. Per Sec.	32-in Height 3½ Sq. Ft. Per Sec.	26-in. Height 2¾ Sq. Ft. Per Sec.	23-in. Height 2½ Sq. Ft. Per Sec.	20-in. Height 2¼ Sq. Ft. Per Sec.
2	5	8½	7	5½	5	4½
3	7½	12¾	10½	8¼	7½	6¾
4	10	17	14	11	10	9
5	12½	21¼	17½	13¾	12½	11¼
6	15	25½	21	16½	15	13½
7	17½	29¾	24½	19¼	17½	15¾
8	20	34	28	22	20	18
9	22½	38¼	31½	24¾	22½	20¼
10	25	42½	35	27½	25	22½
11	27½	46¾	38½	30¼	27½	24¾
12	30	51	42	33	30	27
13	32½	55¼	45½	35¾	32½	29¼
14	35	59½	49	38½	35	31½
15	37½	63¾	52½	41¼	37½	33¾
16	40	68	56	44	40	36
17	42½	72¼	59½	46¾	42½	38¼
18	45	76½	63	49½	45	40½
19	47½	80¾	66½	52¼	47½	42¾
20	50	85	70	55	50	45
21	52½	89¼	73½	57¾	52½	47¼
22	55	93½	77	60½	55	49½
23	57½	97¾	80½	63¼	57½	51¾
24	60	102	84	66	60	54
25	62½	106¼	87½	68¾	62½	56¼
26	65	110½	91	71½	65	58½
27	67½	114¾	94½	74¼	67½	60¾
28	70	119	98	77	70	63
29	72½	123¼	101½	79¾	72½	65¼
30	75	127½	105	82½	75	67½

*Add ½″ to length for each bushing.

Tappings—1½″ right hand thread top and bottom. Bushed for water, steam or vapor as per specifications. All air valve tappings are ⅛″.

Connections—Extra heavy right and left threaded malleable iron nipples at top and bottom.

Furnished on special order with 6″ legs or legless.



THE FIVE TUBE

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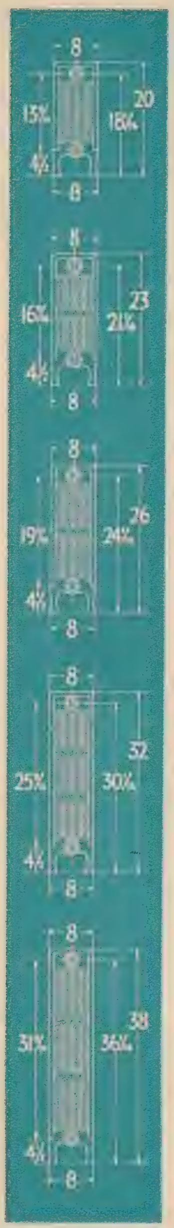
This perhaps is the radiator with the widest field of usefulness. With about 45 per cent more heating surface than the Three Tube, it permits the use of shorter radiators. And with no loss of beauty.



THE FIVE TUBE

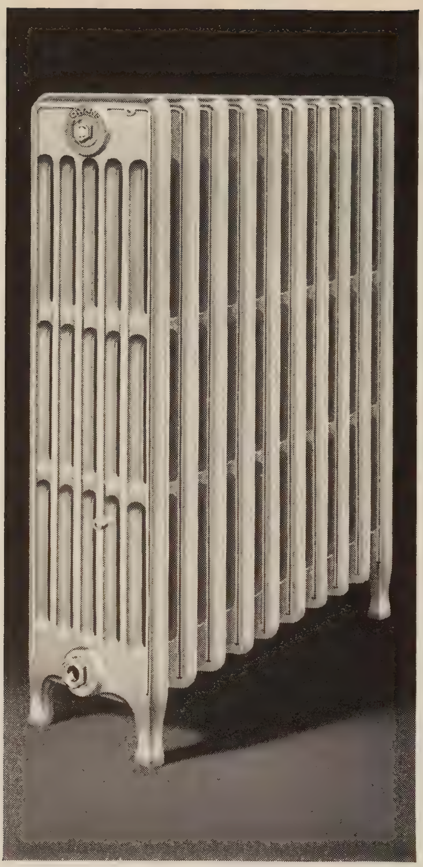
No. of Sections	*Length 2½ in. Per Sec.	Heating Surface—Square Ft.				
		38-in. Height 5 Sq. Ft. Per Sec.	32-in. Height 4⅓ Sq. Ft. Per Sec.	26-in. Height 3½ Sq. Ft. Per Sec.	23-in. Height 3 Sq. Ft. Per Sec.	20-in. Height 2⅔ Sq. Ft. Per Sec.
2	5	10	8⅔	7	6	5⅓
3	7½	15	13	10½	9	8
4	10	20	17⅓	14	12	10⅔
5	12½	25	21⅔	17½	15	13⅓
6	15	30	26	21	18	16
7	17½	35	30⅓	24½	21	18⅔
8	20	40	34⅔	28	24	21⅓
9	22½	45	39	31½	27	24
10	25	50	43⅓	35	30	26⅔
11	27½	55	47⅔	38½	33	29⅓
12	30	60	52	42	36	32
13	32½	65	56⅓	45½	39	34⅔
14	35	70	60⅔	49	42	37⅓
15	37½	75	65	52½	45	40
16	40	80	69⅓	56	48	42⅔
17	42½	85	73⅔	59½	51	45⅓
18	45	90	78	63	54	48
19	47½	95	82⅓	66½	57	50⅔
20	50	100	86⅔	70	60	53⅓
21	52½	105	91	73½	63	56
22	55	110	95⅓	77	66	58⅔
23	57½	115	99⅔	80½	69	61⅓
24	60	120	104	84	72	64
25	62½	125	108⅓	87½	75	66⅔
26	65	130	112⅔	91	78	69⅓
27	67½	135	117	94½	81	72
28	70	140	121⅓	98	84	74⅔
29	72½	145	125⅔	101½	87	77⅓
30	75	150	130	105	90	80

*Add ½″ to length for each bushing.

Tappings—1½″ right hand thread top and bottom. Bushed for water, steam or vapor as per specifications. All air valve tappings are ⅛″.

Connections—Extra heavy right and left threaded malleable iron nipples at top and bottom.

Furnished on special order with 6″ legs or legless.



THE SIX TUBE

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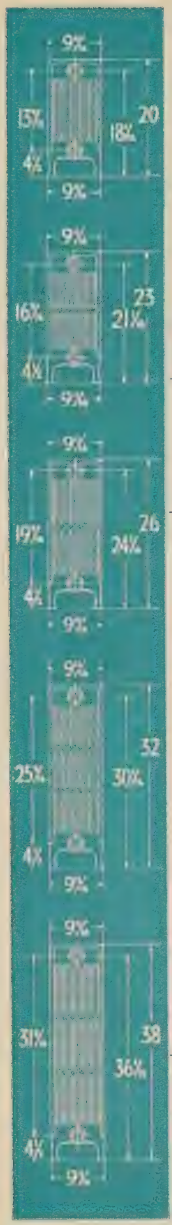
Only 9¹¹⁄₁₆ inches wide, the Six Tube is a concentrated unit providing an unusual amount of heating surface per section. It meets needs in large rooms where available wall space is limited and over-long or too many radiators are not wanted.



THE SIX TUBE

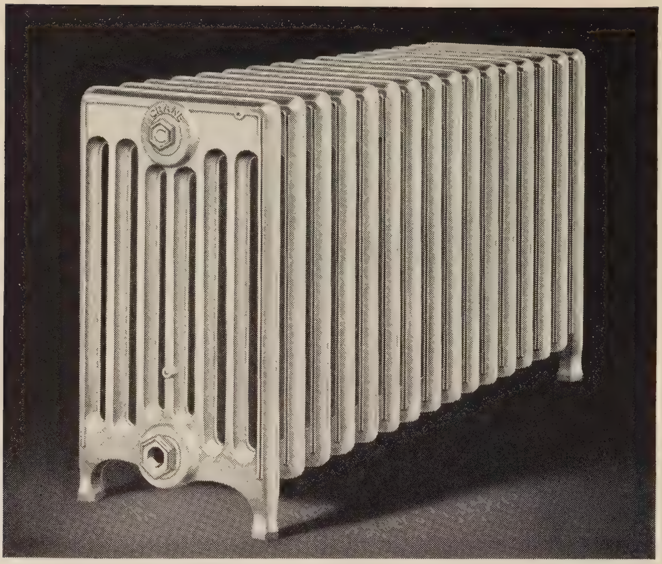
No. of Sections	*Length 2½ in. Per Sec.	HEATING SURFACE—SQUARE FT.				
		38-in. Height 6 Sq. Ft. Per Sec.	32-in. Height 5 Sq. Ft. Per Sec.	26-in. Height 4 Sq. Ft. Per Sec.	23-in. Height 3½ Sq. Ft. Per Sec.	20-in. Height 3 Sq. Ft. Per Sec.
2	5	12	10	8	7	6
3	7½	18	15	12	10½	9
4	10	24	20	16	14	12
5	12½	30	25	20	17½	15
6	15	36	30	24	21	18
7	17½	42	35	28	24½	21
8	20	48	40	32	28	24
9	22½	54	45	36	31½	27
10	25	60	50	40	35	30
11	27½	66	55	44	38½	33
12	30	72	60	48	42	36
13	32½	78	65	52	45½	39
14	35	84	70	56	49	42
15	37½	90	75	60	52½	45
16	40	96	80	64	56	48
17	42½	102	85	68	59½	51
18	45	108	90	72	63	54
19	47½	114	95	76	66½	57
20	50	120	100	80	70	60
21	52½	126	105	84	73½	63
22	55	132	110	88	77	66
23	57½	138	115	92	80½	69
24	60	144	120	96	84	72
25	62½	150	125	100	87½	75
26	65	156	130	104	91	78
27	67½	162	135	108	94½	81
28	70	168	140	112	98	84
29	72½	174	145	116	101½	87
30	75	180	150	120	105	90

*Add ½″ to length for each bushing.

Tappings—1½″ right hand thread top and bottom. Bushed for water, steam or vapor as per specifications. All air valve tappings are ⅛″.

Connections—Extra heavy right and left threaded malleable iron nipples at top and bottom.

Furnished on special order with 6″ legs or legless.



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THE SEVEN TUBE

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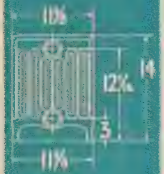
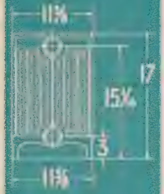
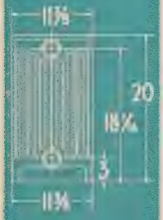
Here is the style for under a window or wherever a low radiator is needed. With standard legs of three inches, the heights are fourteen, seventeen, and twenty inches.

Again in these low radiators, Crane beauty is evident. Note the slim columns and clean vertical lines, the well-proportioned symmetry of the whole.

Meeting a specific architectural and decorative need, the Seven Tube illustrates how completely and well the Crane line meets every building requirement.







THE SEVEN TUBE

No. of Sections	*Length 2½ in. Per Sec.	Heating Surface—Square Ft.		
		14-in. Height 2½ Sq. Ft. Per Sec.	17-in. Height 3 Sq. Ft. Per Sec.	20-in. Height 3⅔ Sq. Ft. Per Sec.
2	5	5	6	7⅓
3	7½	7½	9	11
4	10	10	12	14⅔
5	12½	12½	15	18⅓
6	15	15	18	22
7	17½	17½	21	25⅔
8	20	20	24	29⅓
9	22½	22½	27	33
10	25	25	30	36⅔
11	27½	27½	33	40⅓
12	30	30	36	44
13	32½	32½	39	47⅔
14	35	35	42	51⅓
15	37½	37½	45	55
16	40	40	48	58⅔
17	42½	42½	51	62⅓
18	45	45	54	66
19	47½	47½	57	69⅔
20	50	50	60	73⅓
21	52½	52½	63	77
22	55	55	66	80⅔
23	57½	57½	69	84⅓
24	60	60	72	88
25	62½	62½	75	91⅔
26	65	65	78	95⅓
27	67½	67½	81	99
28	70	70	84	102⅔
29	72½	72½	87	106⅓
30	75	75	90	110

*Add ½″ to length for each bushing.

Tappings—1½″ right hand thread top and bottom. Bushed for water, steam or vapor as per specifications. All air valve tappings are ⅛″.

Connections—Extra heavy right and left threaded malleable iron nipples at top and bottom.

Furnished on special order with 4½″ legs or legless.

CRANE WALL RADIATORS

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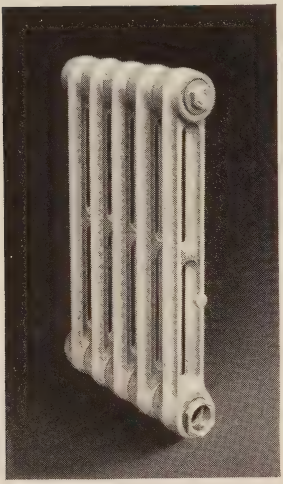

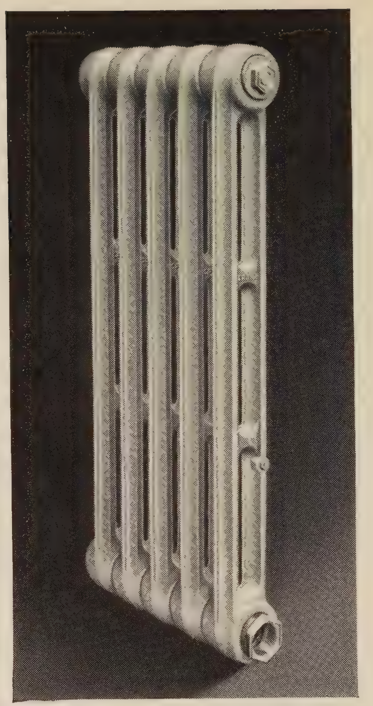

An innovation in Wall Radiator design which offers beauty and flexibility not found in other wall radiators.

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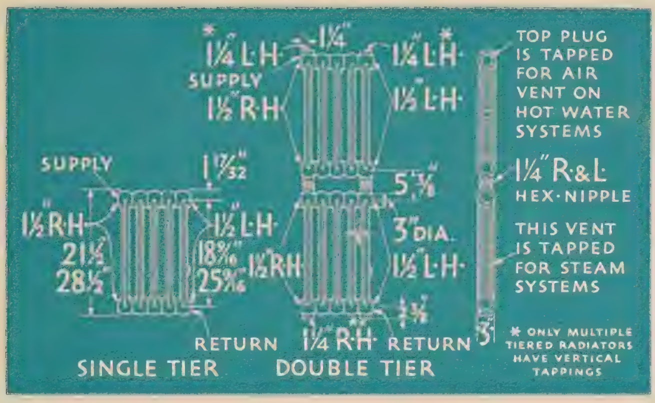
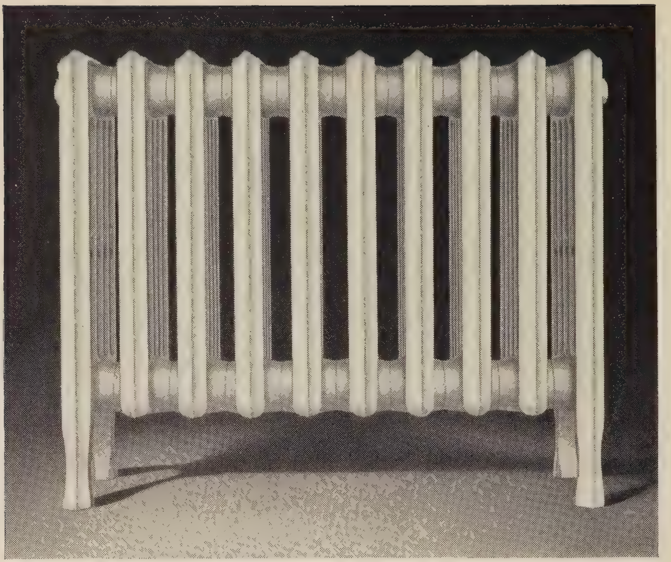
Only 2-tubes, 3-inches wide, Crane Wall Radiators have been worked out to meet the special needs of auditoriums, gymnasiums, large offices, and all building projects where floor space is at a premium. Supported by hooks or brackets, their slender grace will harmonize with any interior design, while their screw nipple construction allows them to be assembled economically in any number of sections required for the area to be heated. Sections can also be arranged for mounting in vertical tiers.



CRANE WALL RADIATORS

No. of Sections	Length 2½ in. Per Sec.	Heating Surface—Square Feet	
		21½-in. Height 1⅖ Sq. Ft. Per Sec.	28½-in. Height 1⅘ Sq. Ft. Per Sec.
2	5	2⅘	3⅗
3	7½	4⅕	5⅖
4	10	5⅗	7⅕
5	12½	7	9
6	15	8⅖	10⅘
7	17½	9⅘	12⅗
8	20	11⅕	14⅖
9	22½	12⅗	16⅕
10	25	14	18
11	27½	15⅖	19⅘
12	30	16⅘	21⅗
13	32½	18⅕	23⅖
14	35	19⅗	25⅕
15	37½	21	27
16	40	22⅖	28⅘
17	42½	23⅘	30⅗
18	45	25⅕	32⅖
19	47½	26⅗	34⅕
20	50	28	36
21	52½	29⅖	37⅘
22	55	30⅘	39⅗
23	57½	32⅕	41⅖
24	60	33⅗	43⅕
25	62½	35	45
26	65	36⅖	46⅘
27	67½	37⅘	48⅗
28	70	39⅕	50⅖
29	72½	40⅗	52⅕
30	75	42	54
31	77½	43⅖	55⅘
32	80	44⅘	57⅗
33	82½	46⅕	59⅖
34	85	47⅗	61⅕
35	87½	49	63

If right and left hand hexagon nipples are used add 1⅛" to the length of radiator for each hexagon nipple used. Add ½" to length for each bushing.



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THE HOSPITAL RADIATOR

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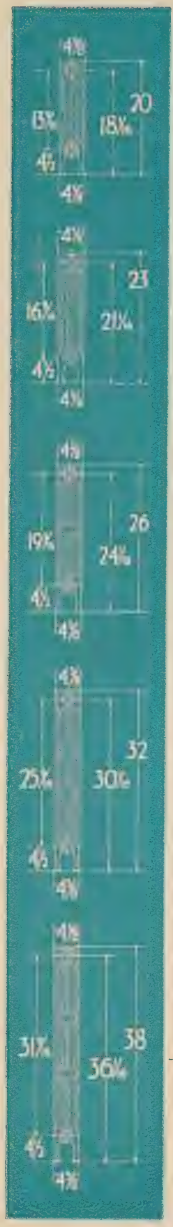
For hospital rooms and wards and for institutions where more than ordinary sanitation is the rule, Crane Hospital Radiators are made.

In them extra distance between centers greatly facilitates cleaning as it permits unhampered use of brush or cloth beneath and between sections.

Crane Hospital Radiators are made to meet all practical conditions in the slender 3-tube and useful 5-tube sizes.



CRANE HOSPITAL RADIATORS

THE THREE TUBE

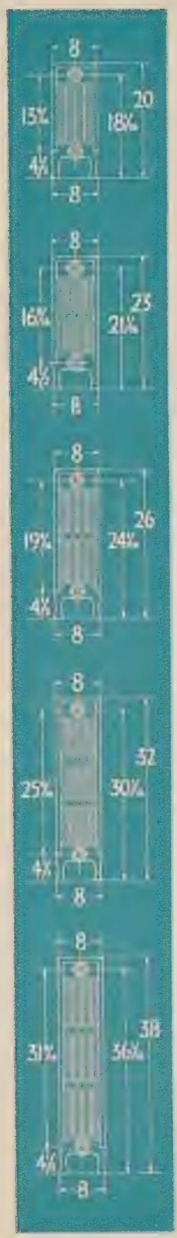
No. of Sections	*Length 3 in. Per Sec.	Heating Surface—Square Ft.				
		38-in. Height 3½ Sq. Ft. Per Sec.	32-in. Height 3 Sq. Ft. Per Sec.	26-in. Height 2⅓ Sq. Ft. Per Sec.	23-in. Height 2 Sq. Ft. Per Sec.	20-in. Height 1¾ Sq. Ft. Per Sec.
2	6	7	6	4⅔	4	3½
3	9	10½	9	7	6	5¼
4	12	14	12	9⅓	8	7
5	15	17½	15	11⅔	10	8¾
6	18	21	18	14	12	10½
7	21	24½	21	16⅓	14	12¼
8	24	28	24	18⅔	16	14
9	27	31½	27	21	18	15¾
10	30	35	30	23⅓	20	17½
11	33	38½	33	25⅔	22	19¼
12	36	42	36	28	24	21
13	39	45½	39	30⅓	26	22¾
14	42	49	42	32⅔	28	24½
15	45	52½	45	35	30	26¼
16	48	56	48	37⅓	32	28
17	51	59½	51	39⅔	34	29¾
18	54	63	54	42	36	31½
19	57	66½	57	44⅓	38	33¼
20	60	70	60	46⅔	40	35
21	63	73½	63	49	42	36¾
22	66	77	66	51⅓	44	38½
23	69	80½	69	53⅔	46	40¼
24	72	84	72	56	48	42
25	75	87½	75	58⅓	50	43¾
26	78	91	78	60⅔	52	45½
27	81	94½	81	63	54	47¼
28	84	98	84	65⅓	56	49
29	87	101½	87	67⅔	58	50¾
30	90	105	90	70	60	52½

*Add ½″ to length for each bushing.

Tappings—1½″ right hand thread top and bottom. Bushed for water, steam or vapor as per specifications. All air valve tappings are ⅛″.

Connections—Extra heavy right and left threaded malleable iron nipples at top and bottom.

Furnished on special order with 6″ legs or legless.



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CRANE HOSPITAL RADIATORS

THE FIVE TUBE

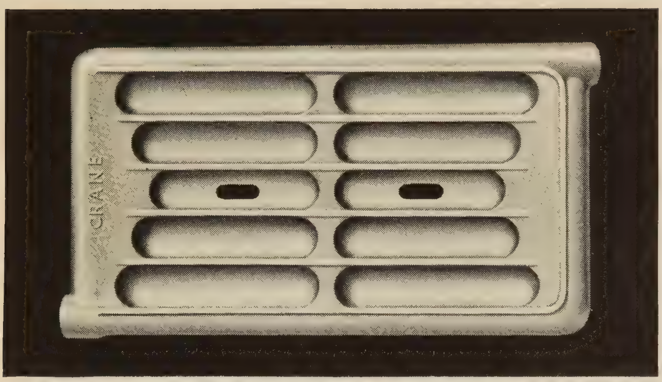
No. of Sections	*Length 3 in. Per Sec.	Heating Surface—Square Ft.				
		38-in. Height 5 Sq. Ft. Per Sec.	32-in. Height 4⅓ Sq. Ft. Per Sec.	26-in. Height 3½ Sq. Ft. Per Sec.	23-in. Height 3 Sq. Ft. Per Sec.	20-in. Height 2⅔ Sq. Ft. Per Sec.
2	6	10	8⅔	7	6	5⅓
3	9	15	13	10½	9	8
4	12	20	17⅓	14	12	10⅔
5	15	25	21⅔	17½	15	13⅓
6	18	30	26	21	18	16
7	21	35	30⅓	24½	21	18⅔
8	24	40	34⅔	28	24	21⅓
9	27	45	39	31½	27	24
10	30	50	43⅓	35	30	26⅔
11	33	55	47⅔	38½	33	29⅓
12	36	60	52	42	36	32
13	39	65	56⅓	45½	39	34⅔
14	42	70	60⅔	49	42	37⅓
15	45	75	65	52½	45	40
16	48	80	69⅓	56	48	42⅔
17	51	85	73⅔	59½	51	45⅓
18	54	90	78	63	54	48
19	57	95	82⅓	66½	57	50⅔
20	60	100	86⅔	70	60	53⅓
21	63	105	91	73½	63	56
22	66	110	95⅓	77	66	58⅔
23	69	115	99⅔	80½	69	61⅓
24	72	120	104	84	72	64
25	75	125	108⅓	87½	75	66⅔
26	78	130	112⅔	91	78	69⅓
27	81	135	117	94½	81	72
28	84	140	121⅓	98	84	74⅔
29	87	145	125⅔	101½	87	77⅓
30	90	150	130	105	90	80

*Add ½″ to length for each bushing.

Tappings—1½″ right hand thread top and bottom. Bushed for water, steam or vapor as per specifications. All air valve tappings are ⅛″.

Connections—Extra heavy right and left threaded malleable iron nipples at top and bottom.

Furnished on special order with 6″ legs or legless.



◆

THE BATHROOM RADIATOR

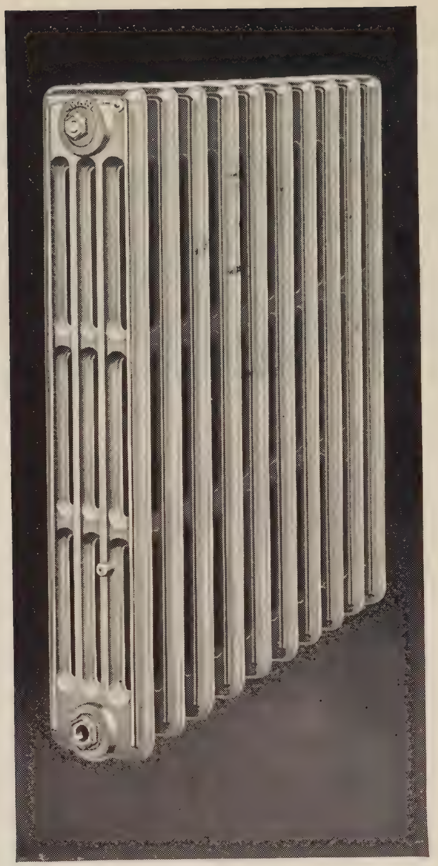
◆

BATHROOM RADIATORS SIZES AND RATINGS

Dimensions	Ratings	
	3½ Foot Section	4½ Foot Section
Length	17	17
Width	9	12
Thickness	1⅜	1⅜

Tapped ½″, both supply and return

The best space saver of all is this Crane bathroom radiator that is easily fastened to the wall by lag screws, hooks, or brackets. It contributes to bathroom beauty in hotels, apartments, and other buildings where all available floor space is needed. It may be used in either horizontal or vertical positions.



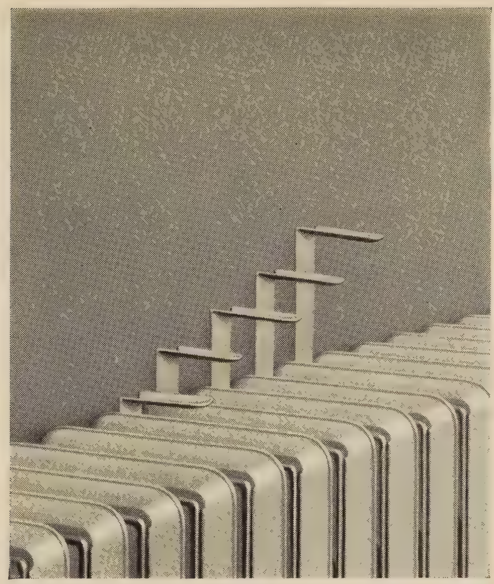
THE LEGLESS RADIATOR

The mode of carpeted floors often calls for a radiator without legs. This one upholds the Crane measure of beauty and heating merit. It is fine for bathrooms and kitchens, because cleaning underneath is easy. Office buildings and hospitals also find much need for it. It is furnished in all widths, and in two, three, four, five, six, and seven tubes.

OVERALL HEIGHT

2, 3, 4, 5 and 6 Tube	*7 Tube*
Standard Height — 38″, 32″, 26″, 23″, and 20″	Standard Height — 20″, 17″, and 14″
Legless Height — 35″, 29″, 23″, 20″, and 17″	Legless Height — 18½″, 15½″, and 12½″

2 tube Legless Height—28½″, 21½″



CRANE INVISIBLE SHIELDS

◆

A simple device that puts the heat where you want it in the room, reduces fuel bills, and protects walls and hangings.

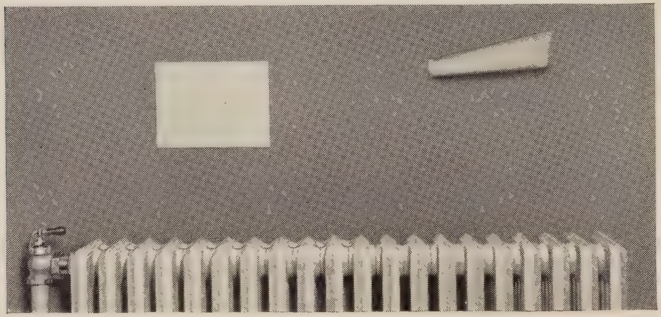
For Crane radiators Crane engineers have worked out an exclusive shield. It is the only shield which can be made integral with the radiator. It is simple, invisible, and strongly made of heavy gauge steel. It is inserted by being slipped down between the beads of the outside sections until a tight joint is formed at the top hub.

In this position Crane shields deflect heated air out into the room as it rises through the radiator and perform a service to comfort

and to economy which, in its importance, is out of all proportion to its small cost.

In ordinary radiator heated homes, ceiling temperatures are practically 25 degrees warmer than floor temperatures. The greatest variation occurs between the floor and the 60″ level.

Obviously this is where the least variation is desirable since it is the most important zone to human comfort. And it is to this strata that Crane radiator shields deflect heated air. In other words, Crane radiators equipped with shields reduce ceiling temperatures and increase the temperature at body heights.



Under long and carefully checked scientific tests, it was proved that in doing this Crane radiator shields reduced by an average of 5% the amount of fuel required to heat a room to a comfortable point from floor to breathing line.

This is not the only service Crane radiator shields extend to economy as the above photograph shows. To test the protection they offer walls, an ordinary 6-tube radiator was installed and partially equipped with shields. Two pieces of paper were placed on the wall above it. You will observe that the sheet over the shielded part was unaffected by the heat while the one above the unshielded part was raised and curled by the force of heated air. Clearly this demonstrates the protection Crane radiator shields offer against blackened areas on walls and plaster, against damage to draperies, pictures and hangings.

RADIATOR
TAPPING AND BUSHING DATA

◆

Crane radiators are tapped 1½ inch right hand thread both top and bottom, and will be bushed as listed below *when specified.*

One-Pipe Work—Steam

Radiators containing 24 square feet and under	1 inch
Above 24, but not exceeding 60 square feet	1¼ inch
Above 60	1½ inch

Two-Pipe Work—Steam

Radiators containing 48 square feet and under	1 x ¾ inch
Above 48, but not exceeding 96 square feet	1¼ x 1 inch
Above 96 square feet	1½ x 1¼ inch

Water—Supply and Return

Radiators containing 40 square feet and under	1 inch
Above 40, but not exceeding 72 square feet	1¼ inch
Above 72 square feet	1½ inch

Vapor

Radiators containing 30 square feet and under	½ x ½ inch eccentric
Above 30 feet not exceeding 60 square feet	¾ x ½ inch eccentric
Above 60 feet, not exceeding 125 square feet	1 x ½ inch eccentric
Above 125 square feet	1¼ x ½ inch eccentric

When radiators are ordered for special systems, specific instructions should be given as to size of bushings. Crane ratings are based upon the Engineering Standard of 240 B. T. U. emission per square foot per hour for steam. All air valve tappings are ⅛ inch.

DOHERTY-BREHM

Humidifying Radiators

THE FINAL STEP IN HEATING HOMES FOR HEALTH, COMFORT, AND ECONOMY

◆

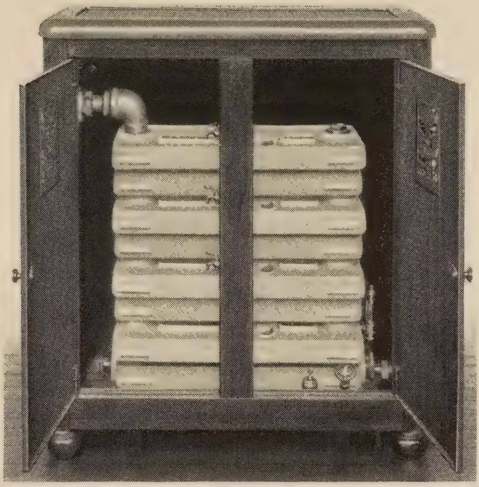
ALMOST without exception the air in homes and offices during the heating season is too dry. The blame cannot be laid on any one form of heating, it is as much a fault of hot water as of hot air or vapor or steam. It is simply that when the temperature of air is increased, its capacity to absorb water is increased.

For example, when the thermometer stands at zero outdoors, the air drawn in to fill a room of average size contains one-eighth of a pint of water. When that air is artificially heated to 70 degrees, its capacity to hold water increases 16 times over. So this thirsty air tries to draw its moisture from the noses, throats, sinuses, skins of the dwelling's occupants; from pictures, hangings, clothes; woodwork and furniture.

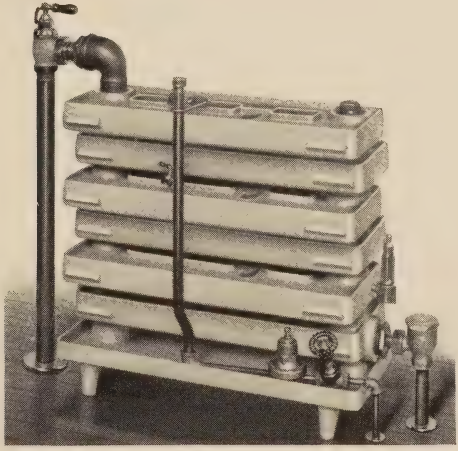
The sure and economical method of supplying correct humidity in heated homes is with a Doherty-Brehm Humidifying Radiator. This radiator can be installed as part of the heating system. It consists of a series of hollow, horizontal sections, made of cast iron. The hollow sections act as heating units, through them flows steam or hot water or vapor. The tops of the sections are troughed. A city water line running through a pressure reducing valve supplies two to three gallons of water per hour in the top trough. When the water reaches a depth of one-eighth inch, it overflows into the section below, from which in turn it overflows into the third.

This continues until all the horizontal troughs have been filled. The amount of water evaporated during the process is governed by the relationship of the temperature outside to the temperature indoors; the unevaporated water runs off into a waste. Throughout the whole process there is no noise, no odor.

The Doherty-Brehm Humidifying Radiator is made in sizes to meet every requirement or type of installation. It can be had in wood or metal cabinets of plain or period design to match the plan of interior decoration.



The Doherty-Brehm Humidifying Radiator is shown here in a cabinet. These cabinets are supplied in metal of Red Mahogany, Antique Walnut, Ivory, Natural Oak or plain finishes — or in wood cabinets of genuine Mahogany or Walnut.



The operating unit of the Doherty-Brehm Humidifying Radiator, 20-C-6 showing the horizontal heating sections with their trough tops and the water line with its pressure reducing valve and pet cocks.

COMPLETE SPECIFICATIONS FOR DOHERTY-BREHM HUMIDIFYING RADIATORS

MODEL			20-C-4	20-C-6	20-C-8	20-C-10	30-C-6	30-C-8	30-C-10	30-C-12
TYPE OF HEATING SYSTEM			Hot Water Steam or Vapor	Hot Water Steam or Vapor	Hot Water Steam or Vapor	Hot Water Steam or Vapor	Hot Water Steam or Vapor	Hot Water Steam or Vapor	Hot Water Steam or Vapor	Hot Water Steam or Vapor
NUMBER OF SECTIONS			4 and Base	6 and Base	8 and Base	10 and Base	6 and Base	8 and Base	10 and Base	12 and Base
E. D. R.‡			52	79	105	131	102	136	170	204
DIMENSIONS	Unit Without Fittings	Length	21	21	21	21	30	30	30	30
		Width	9¾	9¾	9¾	9¾	9¾	9¾	9¾	9¾
		Height	14½	19½	24½	29½	19½	24½	29½	34½
	Unit over-all with Fittings	Length	28	28	28	28	38	38	38	38
		Width	10½	10½	10½	10½	10½	10½	10½	10½
		Height	19¾	24¾	29¾	34¾	24¾	29¾	34¾	39¾
	Metal Cabinet (Outside)	Length	31½	31½	31½	31½	41	41	41	41
		Width	11¾	11¾	11¾	11¾	11¾	11¾	11¾	11¾
		Height	21	33	33	36	36	36	36	42
	Per'd Wood Cabinet (Outside)	Length	35	35	35	None Available	43	43	43	43
		Width	12½	12½	12½		13	13	13	13
		Height	33	33	33		41	41	41	41
WEIGHTS	Unit Complete with Fittings	Uncrated	112 lbs.	154 lbs.	196 lbs.	239 lbs.	199 lbs.	255 lbs.	312 lbs.	368 lbs.
		Crated	127 lbs.	169 lbs.	211 lbs.	254 lbs.	219 lbs.	275 lbs.	332 lbs.	396 lbs.
	Metal Cabinets	Uncrated	40 lbs.	53 lbs.	53 lbs.	65 lbs.	70 lbs.	70 lbs.	80 lbs.	90 lbs.
		Crated	85 lbs.	100 lbs.	100 lbs.	115 lbs.	120 lbs.	120 lbs.	135 lbs.	145 lbs.
	Wood Cabinets	Uncrated	35 lbs.	35 lbs.	35 lbs.	None Available	55 lbs.	55 lbs.	55 lbs.	55 lbs.
		Crated	110 lbs.	110 lbs.	110 lbs.		146 lbs.	146 lbs.	146 lbs.	146 lbs.

MODEL		20-C-4			20-C-6			20-C-8			20-C-10		
Temperature of Heating Medium	Inches of Vacuum or Pounds Pressure	Pounds Evap'd per Hour	Cubic Feet		Pounds Evap'd per Hour	Cubic Feet		Pounds Evap'd per Hour	Cubic Feet		Pounds Evap'd per Hour	Cubic Feet	
			*Homes and Small Apts.	‡Offices and Public Bldgs.		*Homes and Small Apts.	‡Offices and Public Bldgs.		*Homes and Small Apts.	‡Offices and Public Bldgs.		*Homes and Small Apts.	‡Offices and Public Bldgs.
140°	24.0	1.1	3070	2560	1.53	4280	3570	1.88	5260	4380	2.51	7030	5850
150°	22.4	1.39	3890	3245	1.95	5460	4550	2.65	7410	6180	3.41	9550	7950
160°	20.3	1.95	5460	4540	2.65	7410	6180	3.48	9740	8120	4.38	12250	10200
170°	17.7	2.7	7560	6300	3.55	9940	8280	4.46	12480	10400	5.50	15400	12830
180°	14.6	3.48	9740	8120	4.46	12480	10400	5.56	15560	12960	6.75	18900	15750
190°	10.9	4.32	12095	10080	5.5	15400	12830	6.82	19800	15900	8.20	22950	19130
200°	6.5	5.29	14810	12350	6.72	18820	15680	8.28	23170	19300	9.95	27850	23200
215°	1 lb. Pressure	9.9	27700	23050	14.9	41720	34750	19.8	55400	46200	24.8	69400	57900
MODEL		30-C-6			30-C-8			30-C-10			30-C-12		
140°	24.0	2.2	6150	5130	2.7	7560	6300	3.6	10070	8400	4.6	12880	10730
150°	22.4	2.8	7840	6530	3.8	10640	8860	4.9	13700	11440	6.1	17050	14200
160°	20.3	3.8	10640	8860	5.0	14000	11650	6.3	17600	14700	7.7	21550	17950
170°	17.7	5.1	14250	11900	6.4	17900	14920	7.9	22100	18430	9.5	26580	22150
180°	14.6	6.4	17900	14920	8.0	22400	18650	9.7	27100	22630	11.6	32450	27000
190°	10.9	7.9	22100	18430	9.8	27400	22850	11.8	33000	27500	14.2	39760	33130
200°	6.5	9.7	27100	22630	11.9	33300	27750	14.3	40000	33300	17.1	47900	40000
215°	1 lb. Pressure	19.5	54600	45490	26.0	72800	60660	32.5	91000	75820	39.0	109200	90987

*The capacity for "Homes & Small Apts." is based on adding 2½ grains of water per cubic foot of air (at 70°) per hour.

‡The capacity for "Offices & Public Buildings" is based on adding 3 grains of water per cubic foot of air (at 70°) per hour.

**The equivalent direct radiation (E.D.R.) load in square feet is based on the Engineering Standard of 240 B.t.u. per square foot per hour at 70° room temperature with one pound steam pressure.

Note: The above humidifiers are not recommended for steam pressures in excess of two pounds as the extremely rapid evaporation causes a boiling sound which makes them unsatisfactory for domestic service. For industrial use where noise is not a factor, higher pressures may be used with correspondingly higher outputs.

The ratings on this sheet are based on a maximum relative humidity of 40%. For special installations requiring a higher percentage a larger size will be necessary.

Backed by 76 years manufacturing experience

◆

The Crane line of radiators is still another forward step in a growth that has been unbroken through the 76 years of Crane service. Crane service to builders includes besides the improved line of radiators, plumbing materials whose quality needs no comment, and valves and fittings that are accepted as the standard of comparison.

For protection of the public and assurance of satisfactory installation, Crane radiators are sold only through responsible heating contractors, just as Crane plumbing materials are sold only through responsible plumbing contractors. Recognizing that the interests of public, contractor, and manufacturer are identical, the Crane organization and its resources are devoted to closer co-operation with architect, contractor, and builder.

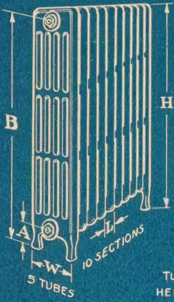
On monthly payments, if desired

For modernizing work Crane heating materials can be fully installed on the Crane Budget Plan. Under this plan, the buyer pays nothing until everything is in place and extra value added to his property. Then he pays only a small sum down, a small sum monthly.

CRANE

CRANE CO., GENERAL OFFICES: 836 S. MICHIGAN AVE., CHICAGO
NEW YORK OFFICES: 23 W. 44TH STREET
Branches and Sales Offices in One Hundred and Ninety Cities
Radiator Manufacturing Plants—Bridgeport and North Tonawanda, N. Y.

CRANE RADIATORS



DIMENSIONS

		NUMBER OF TUBES				
		3	4	5	6	7
	W	4⅝	6 5/16	8	9 11/16	11⅜
H ↓	L	2½	2½	2½	2½	2½
	A	4½	4½	4½	4½	3
14	B	—	—	—	—	12 1/16
17	B	—	—	—	—	15 1/16
20	B	18 1/16	18 1/16	18 1/16	18 1/16	18 1/16
23	B	21 1/16	21 1/16	21 1/16	21 1/16	—
26	B	24 1/16	24 1/16	24 1/16	24 1/16	—
32	B	30 1/16	30 1/16	30 1/16	30 1/16	—
38	B	36 1/16	36 1/16	36 1/16	36 1/16	—

NOTE: ADD ½" TO L FOR EACH BUSHING

TAPPINGS

1½" RIGHT HAND THREAD TOP & BOTTOM. BUSHED FOR WATER, STEAM OR VAPOR AS PER SPECIFICATIONS. ALL AIR VALVE TAPPINGS ARE ⅛".

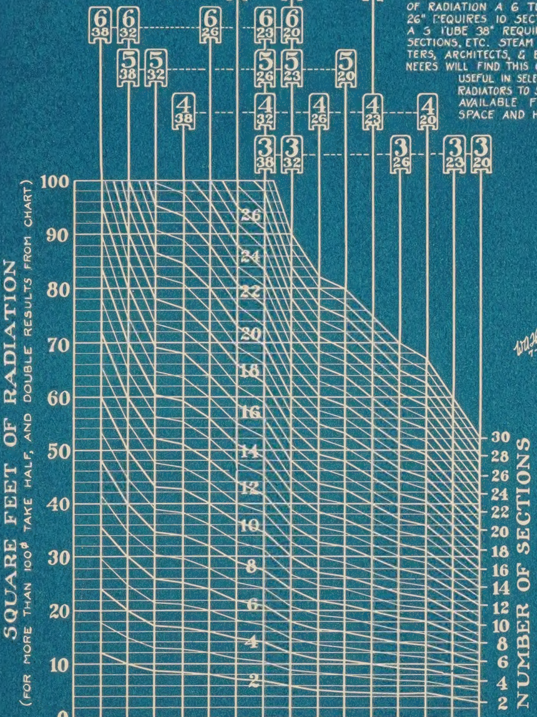
CONNECTIONS

EXTRA HEAVY RIGHT & LEFT THREADED MALLEABLE IRON NIPPLES AT TOP & BOTTOM. FURNISHED ON SPECIAL ORDER WITH 6" LEGS OR LEGLESS.

HOW TO USE CHART

AT THE INTERSECTION OF DESIRED FT. OF RADIATION (HORIZONTAL LINE) WITH RADIATOR SIZE (VERTICAL LINE) READ NUMBER OF SECTIONS REQUIRED ON ZIG-ZAG LINE INTERSECTING OR NEAREST ABOVE. THUS FOR 40 FT. OF RADIATION A 6 TUBE 26" REQUIRES 10 SECTIONS; A 3 TUBE 38" REQUIRES 12 SECTIONS, ETC. STEAM FITTERS, ARCHITECTS, & ENGINEERS WILL FIND THIS CHART USEFUL IN SELECTING RADIATORS TO SUIT AVAILABLE FLOOR SPACE AND HEIGHT.

TUBES →
HEIGHT, H →
7 20
7 17
7 14



W.A.Thomas
7-16-31

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